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Sheridon et al.

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[54] OPTICALLY SENSITIVE ELECTRIC PAPER

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345/84

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[57] ABSTRACT

An improved electric paper which allows it to form an image from a light image rather than from an applied electric field. The prior art embodiment had a number of rotatable balls imbedded in a plastic substrate. Each ball had hemispheres that had different electrical characteristics, and were colored differently. Under the influence of an image in the form of an electrical field, the balls would selectively rotate to form a permanent visible image, whereupon the field could be removed. This invention has two conductive surfaces to provide a uniform electric field across the substrate, and then exposes the substrate to light which selectively changes the electrical characteristics of one of the two hemispheres, resulting in the rotation of the selected balls to form the image.

8 Claims, 4 Drawing Sheets

